Gulf of Mexico Harmful Algal Bloom Bulletin

4 October 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: October 1, 2007

Conditions Report

NE Florida: A harmful algal bloom has been identified in Nassau, Duval, Saint Johns and Flagler counties. Patchy high impacts are possible in Duval and northern Saint Johns counties and moderate impacts are possible in Nassau, central to southern Saint Johns, and Flagler counties today through Sunday, October 7.

SW Florida: No impacts are expected in southwest Florida today through Sunday, October 7.

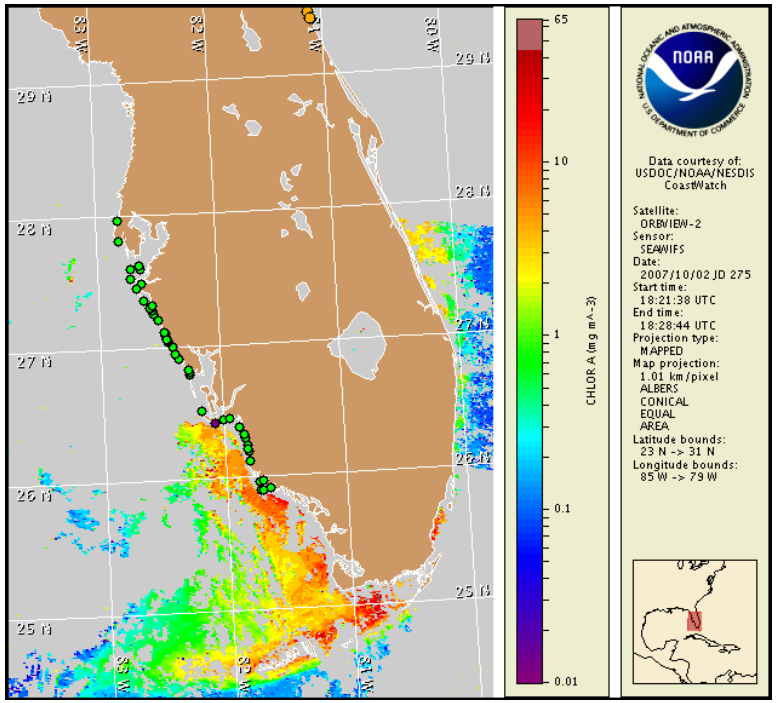
Analysis

**** This is a supplemental bulletin to bulletin number 62, issued Monday October 1 due to the expansion of the harmful algal bloom in northeast Florida.****

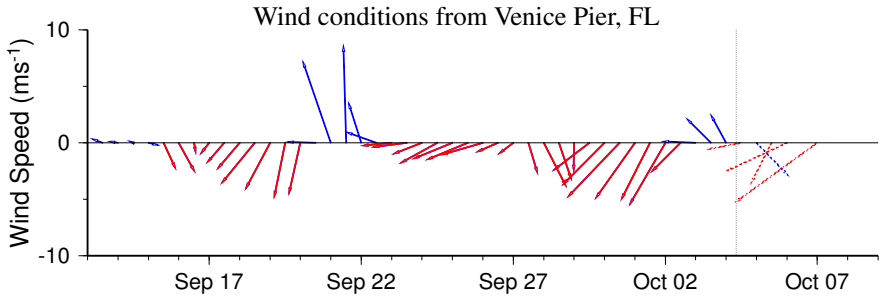
NE Florida: A harmful algal bloom has been identified onshore in Nassau, Duval, Saint Johns and Flagler counties. Medium concentrations of *Karenia brevis* were found onshore Flagler County (FWRI; 10/2). Additional sampling in Saint Johns County confirms continued medium concentrations of *K. brevis* and sample results from Duval county indicate 'Low a' concentrations (FWRI; 10/1-2). Satellite imagery is obscured by clouds throughout northeast Florida. Continued sampling is recommended. Onshore winds will increase the potential for impacts today through Sunday.

SW Florida: Recent samples collected in Pinellas, Manatee, Sarasota, Charlotte, and Collier counties indicate that *K. brevis* is not present. Nonharmful algae were also found in the samples collected. Satellite imagery is cloudy over most of southwestern Florida. A small patch of elevated chlorophyll level is visible in southern Lee County south of Sanibel Island where 'low a' concentrations of *K. brevis* were previously reported (FWRI; 26). The patch is centered at 26°1.3'N 82°9.2'W (~4 μg/L). No impacts are expected today through Sunday along southwest Florida. Conditions are favorable for intensification and formation of a harmful algal bloom. Continued sampling is recommended.

Urizar, Keller



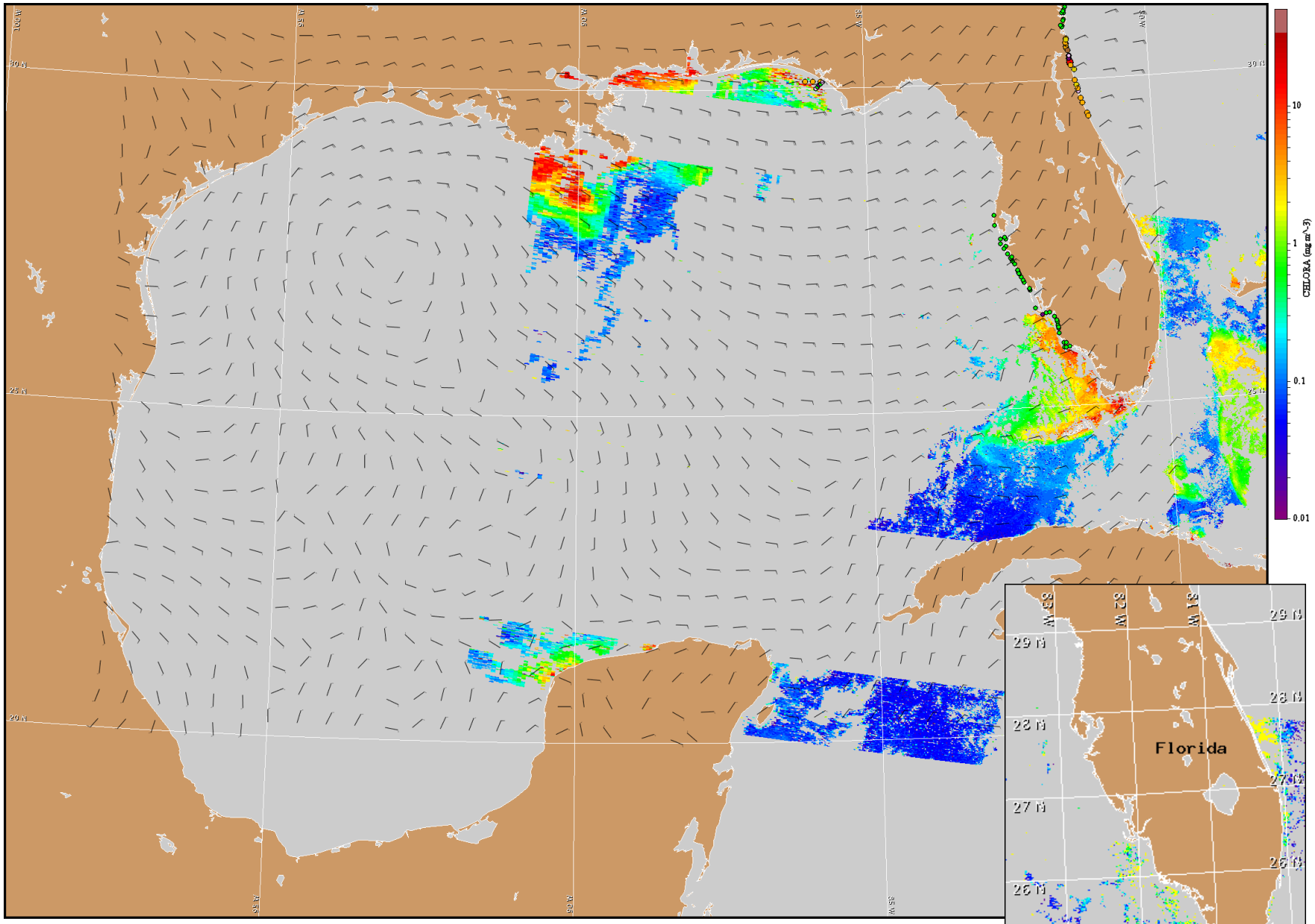
Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from September 24 to October 3 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:
http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

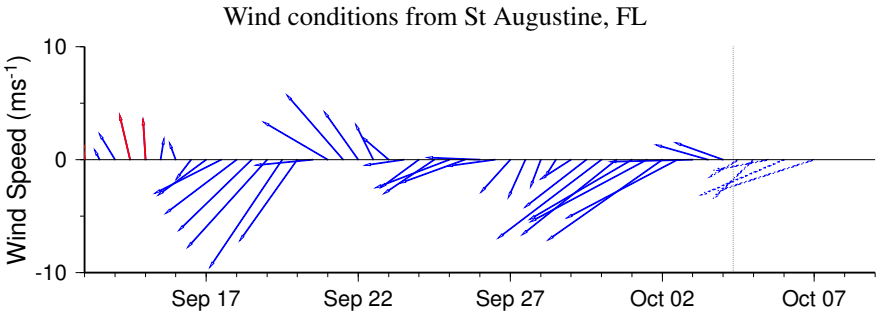
NE Florida: Northeasterly to easterly winds today and Friday (10-20 kt, 5-10 m/s). Easterly winds Saturday and Sunday (15-20 kt, 8-10 m/s).

SW Florida: Easterly winds today (10 kt, 5 m/s). Northeasterly winds Friday and Saturday (10-15 kt, 5-8 m/s). Easterly winds on Sunday (20 kt, 10 m/s).



Satellite chlorophyll image and forecast winds for October 5, 2007 06Z with Cell concentration sampling data from September 24 to October 3 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf

Verifi ed and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).


Wind conditions from St Augustine, FL
Wind Speed (ms-1)
10
0
-10
Sep 17
Sep 22
Sep 27
Oct 02
Oct 07